



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,863	08/08/2001	Huima Antti	930.334USW1	2899

32294 7590 11/16/2005

SQUIRE, SANDERS & DEMPSEY L.L.P.
14TH FLOOR
8000 TOWERS CRESCENT
TYSONS CORNER, VA 22182

EXAMINER

GESESSE, TILAHUN

ART UNIT	PAPER NUMBER
----------	--------------

2684

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/924,863

Applicant(s)

ANTTI, HUIMA

Examiner

Tilahun B. Gesesse

Art Unit

2684

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-42 and 58-68 is/are rejected.
- 7) ☒ Claim(s) 43-57 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is in response to applicant's argument filed August 16, 2005 in which claims 33-68 are pending.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract in this particular application contains legal phraseology often used in patent claims such as comprising or said, which requires appropriate correction.

Response to Arguments

2. Applicant's arguments filed August 16, 2005, have been fully considered but they are not persuasive because applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Therefore, the examiner respectfully disagrees with applicant's arguments.

On page 6, first paragraph of applicant's response, applicant generalized that the claim invention allows a relatively large number of difference security methods to be implemented using only a small number of different messages.

The examiner disagrees. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., allows a relatively large number of difference security methods to be implemented using only a small number of different messages) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

On page 6, first paragraph through page 9 , third paragraph of applicant's response, applicant argued that the applied prior arts do not teach. The examiner disagrees with applicant's allegation.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Yahagi' 401 teaches securing method using authenticating mobile station requesting an access to the network, using authentication calculation, by generating a random number with respect to mobile station as authentication random number by the base station (see abstract). Further more, '401 teaches the mobile station controller ,

Art Unit: 2684

using method of authentication technique i.e., random number, authentication calculation result, and mobile station identification number, confirms the request. See figures 3 and its disclosure. Further, '401 teaches that the authentication confirmation signal 34 has a set of parameters, the authentication calculation result, contained in the parameter of the authentication response signal, the random number generated by the base station and the mobile station identification number (see column 5, lines 38-43). Further more, '401, teaches authentication of the mobile station having two authenticating targets, authentication random number generating mechanism (see column 7, lines 7-15), further; '401 teaches the authentication target 61 and 62 using authentication keys and authentication algorithm, (see column 7, lines 23-34).

Taking claim 1, '401 teach a method of securing communication between a first party (mobile station) and a second party (network, that is, base station and mobile station controller), the controller defines a criteria to authenticate a mobile station requesting communication, an calculating the parameters, such as random number or ID, in a result secure the communication of the network.

Applicant seems to argue that plurality of security method, however, '401 teaches plurality of methods (random number or authentication key and authentication algorithm etc are plurality of methods used by Yahagi).

Murto (US patent No. 5,991,407) in support to Yahagi teaches also securing communication using plurality of securing techniques, such as A 32-bit Signed Response (SRES) parameter is calculated by an A3 algorithm from a 128-bit random number (RAND) and authentication key Ki, (See abstract).

Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

Applicant reminds that the examiner rejects applicant claims according rules and procedures of USPTO, reads the broadest reasonable interpretation of claim.

To sum up, in view of the applied prior art and applicant's alleged argument , the rejection is proper, therefore, maintained.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 33-42 and 58-68 are*rejected under 35 U.S.C. 103(a) as being unpatentable over Yahagi in view of Murto.

As to claims 33,60-63 Yahagi discloses a method of securing communication (fig.1) between a first party (mobile station 1) and a second party in a telecommunication network (network) comprising: defining a criteria for selecting one of a plurality of different security methods (column 2,lines 7-24), the plurality of security methods each at least two different security method having at least one message in common (column 3, lines 1-28), Yahagi discloses selecting one of the plurality of

Art Unit: 2684

different security methods in accordance with said defined criteria and performing said security method the steps as taught in , column 2 lines 7-13 and column 3 lines 1-28). Yahagi differs in teaching a plurality of messages selected from a set of messages types. However, Murto discloses plurality of messages selected from a set of message types (plurality of IMSI and Ki stored are selected for securing the communication (see figures 6-7 and see column 6, line 61-column 8, line 12). It would have been obvious to an artisan of ordinary skill in the art at the time of the invention was made to select a message from plurality of messages stored in the database to secure communication between a mobile terminal and wireless communication network, as evidenced by Murto, in order to identify the user and secure the communication from intruders by that minimize cost of air time of the system or service provider.

At to claim 34, **Yahagi discloses** the criteria are to select the security method is selected at random (column 3 lines 58-column 4, line 4).

As to claim 35, Yahagi discloses processing capability of the first and second party (mobile and BS/MSC/DB, column 2 lines 55-68 and figure 6).

As to claim 36, Yahagi inherently discloses select the security based on the amount of time since last security method was perfumed.

As to claim 37, Yahagi discloses security method is based on the function provided by the security method (authentication calculation result "function" (figure 3).

As to claim 38, **Yahagi discloses** the plurality of security methods comprising at least one authentication method or at least one rekeying method (figure 3).

As to claim 39, Yahagi inherently discloses at least one authentication method includes a key exchange to create a shared secret.

As to claims 40 and 42,58-59 **Yahagi discloses** a rekeying method is performed after an authentication method (column 3, lines 60-67).

As to claim 41, Yahagi discloses the set of messages includes at least one random number message (column 3, lines 60-67 and figure 1).

Regarding claims 64-68, **Yahagi discloses** a method of securing communication (fig.1) between a first party (mobile station 1) and a second party in a telecommunication network (network) comprising: defining a criteria for selecting one of a plurality of different security methods (column 2, lines 7-24), the plurality of security methods each at least two different security method having at least one message in common (column 3, lines 1-28), Yahagi discloses selecting one of the plurality of different security methods in accordance with said defined criteria and performing said security method the steps as taught in , column 2 lines 7-13 and column 3 lines 1-28). Yahagi differs in teaching a plurality of messages selected from a set of messages types. However, Murto discloses plurality of messages selected from a set of message types (plurality of IMSI and Ki stored are selected for securing the communication (see figures 6-7 and see column 6, line 61-column 8, line 12). It would have been obvious to an artisan of ordinary skill in the art at the time of the invention was made to select a message from plurality of messages stored in the database to secure communication between a mobile terminal and wireless communication network, as evidenced by

Murto, in order to identify the user and secure the communication from intruders by that minimize cost of air time of the system or service provider.

Allowable Subject Matter

5. Claims 43-57 are objected to as being dependent upon a rejected base claim, the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach the set of messages includes at least one of the following message types: at least one random number message at least one hash function message at least one signature function message at least one parameter for use with a given function message', at least one security parameter message at least one key for a given function message', at least one encoded message at least one message to and/or from at least one third party; and at least one authentication response message.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2684

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

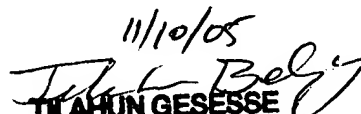
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tilahun B Gesesse whose telephone number is 571-272-7879. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882.

The Central FAX Number will change to 571-273-8300. This new Central FAX Number is the result of relocating the Central FAX server to the Office's Alexandria, Virginia campus.

CENTRALIZED DELIVERY POLICY: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

11/10/05

TILAHUN GESESSE
PRIMARY EXAMINER